Fix the leaky pipeline!
A career building program for women in science (Ph.D.)

Project Leader: Gabriella Meier Bürgisser, Eawag, gmeier@eawag.ch, tel. 044 823 51 77

1. Brief project description
This Impulse program offers young female Ph.D.s the opportunity to reflect on their professional situations, develop a strategy for embarking on a career path, receive targeted further training, and extend their personal and scientific networks. The core elements of the project are customized further education, work in peer groups, inter-institutional cooperation and the setup of an interdisciplinary network. The aim, actively supported by the ETH domain, is to help more women take their scientific careers further by fixing the ‘leaky pipeline’ of women in science.

2. Starting position
Many female Ph.D.s give up their scientific careers following doctorate or postdoctorate work (phenomenon of the leaky pipeline: see Fig. 1). This is because a scientific career is a very insecure one: permanent contracts are rare and the competition for them fierce. The mobility requirement is also a frequent obstacle, as women at this stage of their lives often face the issues of childbearing and how to combine career and family. It is common for female scientists to have male scientists as partners (80% of female scientists and <50% of male scientists, according to the study *Arbeitswelt in Bewegung* [The changing world of work] published by the Federal Ministry for Education and Research, 2006), which further complicates the situation of these women (dual careers). In addition, in the male-dominated ETH domain there are few female colleagues with whom to discuss career paths, and the lack of role models confirms or strengthens the feeling that women have minimal chances.

3. Target audience
The project is aimed at women who have completed their dissertations and who are working on limited contracts in the ETH domain. Structurally, there are numerous short-term positions for female academics in science. These, depending on the respective institution, may cover a period of 6-9 years after completion of the Ph.D. Currently about 500 female scientists hold such posts in the ETH domain. It is in this phase, between the ages of 30 and 40, that the decision between a scientific or another career will be taken. At the four ETH research institutes (PSI, WSL, Empa and Eawag) this is also the qualifying period for a permanent scientific staff position. To date – with the exception of the program ‘Mentoring Deutschschweiz’ [‘Mentoring for German Switzerland’], with 4-6 ETH participants – there exists no specific further training program for this target group.

4. Project goal
• **Reduce the number of women leaving science**
In this program female scientists will reflect on their situations, explore the formal and informal rules of play in science and research, and work on developing the necessary competences to exist in that environment. They will extend their networks and, via peer-group exchange, explore various options and elaborate bases for taking targeted decisions on their next career steps, to carry forward what they have begun.
Figure 1: ‘Leaky pipeline’ in the ETH domain, 2004: careers in science represented in percentages according to gender.

- An increase in the number of women/female role models in high scientific positions
  More women/female role models in science will prove that women do, in fact, have a chance. ‘Nothing is so decisive in the growth of the female contingent as the latter itself.’ Christine Nüsslein-Vollhard, geneticist and Nobel prizewinner.

5. Measures
There are five cornerstones to this Impulse program, which will involve participants for a period of one year.

5.1 Open Space
An initial one-day event will kick off the program. This will take the form of a so-called ‘Open Space’: a method which facilitates the rapid collection and focusing of ideas and concrete themes in a large-group context. Possible themes are recruiting and appointment procedures; instruments fostering research; acquisition of external funding; planning for the future: science versus industry; a scientific career as a cul-de-sac: alternatives and ways out; working abroad; work-life balance; balancing career and family; managing dual careers.
The Open Space day will take place next spring in Berne.

5.2. Group coaching
Groups will be formed at the Open Space event which will work together over the period of a year in a group coaching situation (working/theme groups). Supervised by a female expert, 6 to 10 women will focus on concrete issues with relation to their personal career development.
Coaching sessions will take place in the zone Zurich and Lausanne.

5.3. Course modules
Roughly four 1- to 3-day courses will be offered in which participants work on acquiring the necessary skills. These courses will be self-supporting and also open to non-Open Space participants.
Courses will take place in the zone Zurich and Lausanne.
5.4. Internet forum
The internet forum will facilitate exchanges among participants and organizers of the Impulse program. It will serve mainly as a networking and exchange platform for participants.

5.5 Concluding event
In conclusion, a one-day workshop will take place at which participants from Open Space, group coaching, and the course modules carry out an assessment and inform each other on their experiences, progress and goals achieved.
The concluding event will take place in Berne.

6. Evaluation
Evaluations will be performed by the project supervisor after each individual event and at the conclusion of the pilot project. Evaluation instruments will comprise questionnaires, compilation of quantitative data, the internet forum and feedback discussions.

The concluding evaluation will cover all 5 cornerstones of the program: the Open Space event, group coaching, the course modules, and the final event. It will provide feedback on the following main points:
- Satisfaction with the further training offer
- Applicability of the elaborated strategies to actual professional conditions
- Relevance for decision-making or for orienting a professional career in science
- Possibility of deploying the vision in practice
- Networking with other female scientists

The concluding evaluation will also include a list of all the issues brought up at the Open Space event, plus documentation of the project with financial, personnel and publicity details.

7. Transfer
- Development of a modular further training offering for female Ph.D.s in science
- Setup of a ‘Coaching School’ within the ETH domain and the institutionalization of a ‘coaching culture’ for female scientists
- Setup of an internet forum for female Ph.D.s in science which not only encourages networking between participants, but also facilitates contact with female professionals in science, industry and politics
- Creation of a pool of female candidates for professorships and leading research positions
- Launching of a discussion concerning the structural problem in the academic world: besides a professorship, what academic career alternatives are on offer in research and science?
- Profiling of the ETH domain as an innovative and progressive institution which engages itself for the fostering of female excellence.

8. Project information
- Possible project start: January 2007
- Possible project end: September 2008
**Project organization**
The ETH-Domain Workgroup for Equal Opportunities for Women and Men has developed this project and will be engaged in its realization. For the project leadership it is requesting funding for an additional 20% personnel appointment for zone Zurich and 10% assistant to project leader for zone Lausanne. The ETH-Domain Workgroup assists the project leader and his assistant, mainly in the administration of open space and concluding event. Moreover, the members are involved in editorial tasks and in collect names of local coaches and presenters.

**Project Director**
Gabriella Meier Bürgisser
Eawag, Equal Opportunities for Women and Men
Überlandstrasse 133, Postfach 611
8600 Dübendorf
Tel.: 044 823 51 77, Fax: 044 823 53 75
Email: gmeier@eawag.ch

**Projekt management**
- Luzia Lehmann, Dr., Equal Opportunities for Women and Men, ETHZ
- Farnaz Moser, Dr., Equal Opportunities for Women and Men, EPFL
- Anne Satir, Dr., Empa Academy
- Sabine Schenker, Dr., Equal Opportunities for Women and Men, PSI
- Carla Zingg, Equal Opportunities for Women and Men, ETHZ
- NN, Equal Opportunities for Women and Men, WSL
- NN, Equal Opportunities for Women and Men, Empa

**Budget, Phase Model and Timeline** are found in the Appendix

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